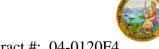
### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-020987 Address: 333 Burma Road **Date Inspected:** 23-Feb-2011

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** See Below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** OBG

**Summary of Items Observed:** 

CWI Inspector: Mr. Bao Qian

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG Bay 14

This QA Inspector observed ZPMC welder Mr. Xu Kesong, stencil 020009 used flux cored welding procedure WPS-B-T-2232-ESAB to make weld SA3208-001-001. This QA Inspector observed a welding current of approximately 320 amps and 26.5 volts, the base materials were preheated with electric heating elements and Mr. Xu Kesong appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wang Zhengbin, stencil 216086 used shielded metal arc welding procedure WPS-345-SMAW-2G(2F)-FCM-1 to make repairs of visual rejections on OBG segment 13AE weld SEG3007Q-038. This QA Inspector observed a welding current of approximately 180 amps and a torch was used to preheat the base materials prior to welding. This QA Inspector observed Mr. Wang Zhengbin appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract

# WELDING INSPECTION REPORT

(Continued Page 2 of 3)

documents.

This QA Inspector observed ZPMC welder Mr. Wei Hengbin, stencil 068924 used shielded metal arc welding procedure specification WPS-B-P-2213-TC-U5B-FCM to make OBG segment 13AE weld SEG3007H-168. This QA Inspector observed a welding current of approximately 170 amps and Mr. Wei Hengbin appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wu Wanyong stencil 050242 used flux cored welding procedure WPS-B-T-2232-ESAB to make OBG segment 13AE weld SEG3007AH-084. ZPMC QC had recorded a welding current of 310 amps and 25.7 volts. Mr. Wu Wanyong appeared to be certified to make his weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Du Hengyou, stencil 037743 used shielded metal arc welding procedure specification WPS-345-SMAW-3G(3F)-FCM-Repair to make repairs of OBG segment 13AE weld SEG3007M-106. ZPMC QC informed this QA Inspector that weld repair document B-WR-19316 documents this weld repair. This QA Inspector observed a welding current of approximately 170 amps, the base materials appear to have been preheated with electric heating elements and Mr. Du Hengyou appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Yang Yunfeng, stencil 215553 used shielded metal arc welding procedure specification WPS-345-SMAW-2G(2F)-FCM-Repair to make repairs of OBG segment 14E weld DP3160-001-005. ZPMC QC informed this QA Inspector that weld repair document B-WR-20269 documents this weld repair. This QA Inspector observed a welding current of approximately 175 amps, the base materials appear to have been preheated with electric heating elements and Mr. Du Hengyou appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Niu Duojun, stencil 037932 used shielded metal arc welding procedure specification WPS-345-SMAW-2G(2F)-FCM-Repair to make repairs of OBG segment 14E weld DP3160-001-003. ZPMC QC informed this QA Inspector that weld repair document B-WR-20249 documents this weld repair. This QA Inspector observed a welding current of approximately 170 amps, the base materials appear to have been preheated with electric heating elements and Mr. Niu Duojun appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Li Yong Shui, stencil 067656 used shielded metal arc welding procedure specification WPS-345-SMAW-2G(2F)-FCM-Repair to make repairs of OBG segment 14E weld DP3160-001-003. ZPMC QC informed this QA Inspector that weld repair document B-WR-20249 documents this weld repair. This QA Inspector observed a welding current of approximately 180 amps, the base materials appear to have been preheated with electric heating elements and Mr. Li Yong Shui appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Sun Gusong stencil 058592 used shielded metal arc welding procedure specification WPS-B-P-2113-FCM-1 to complete OBG segment 13AE tack weld SEG3007K-004. This QA Inspector observed a welding current of approximately 170 amps and the base materials had been preheated

# WELDING INSPECTION REPORT

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with a torch. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Yang Gencheng, stencil 066418 used shielded metal arc welding procedure WPS-345-SMAW-3G(3F)-FCM-Repair to make weld repair of ultrasonic rejections to OBG segment 14E weld SEG3019BB-157. ZPMC QC informed this QA Inspector that weld repair document B-WR-20270 documents this weld repair. This QA Inspector measured a welding current of approximately 170 amps and Mr. Yang Gencheng appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Luo Xuanping, stencil 067610 used shielded metal arc welding procedure WPS-B-P-2114-FCM-1 to make OBG segment 14E weld SEG3019BB-051. This QA Inspector observed a welding current of approximately 175 amps. This QA Inspector observed Mr. Luo Xuanping appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.





### **Summary of Conversations:**

See Above.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey +8615000026784, who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Riley,Ken	QA Reviewer